The duties of the special agents will be to perform social case work with delinquent women and girls, to assist in securing the examination and treatment of those infected with venereal diseases, to aid in the enforcement of laws regarding commercialized vice, to visit places of amusement and report on conditions found. Appointees will also be required to compile community reports and case records of individuals dealt with. They must be capable of working without immediate supervision and must possess qualifications necessary to enlist the local community's interest and cooperation.

The duties of the assistant special agents, will be to perform social case work with delinquent women and girls similar to those performed by special agents, namely, assisting in securing the examination and treatment of those infected with venereal diseases, aiding in the enforcement of laws regarding commercialized vice, visiting public places of amusement and reporting on conditions found, etc.

These positions will be filled as the result of open competitive examinations conducted by the United States Civil Service Commission. The examinations will be held March 25 and 26, 1919.

For further information address the Civil Service Commission, Washington, D. C.

LETHARGIC ENCEPHALITIS.

A NOTIFIABLE DISEASE IN ENGLAND.

The attention of health officers is invited to the following instructive description of a new epidemic disease recently observed in Europe. It is desirable to know whether any such cases have been observed in this country, and if so, to what extent the disease prevails.

At a meeting of the Vienna psychiatric society, held in April, 1917, Von Economo described a group of cases of a disease occurring in epidemic form to which he gave the name "encephalitis lethargica." A discussion concerning the same disorder was held the following month by the Paris Academy of Medicine, and Prof. Netter there expressed the opinion that the disease was not a form of acute poliomyelitis. He also quoted some evidence in support of the view that the disease occurred at the end of the seventeenth and beginning of the eighteenth century in Germany and more definite evidence that it occurred in Upper Italy and Hungary in 1890. Very suggestive cases occurred in nearly all the countries of Europe and in the United States in the spring of 1895. From the data presented by Von Economo it is evident that the disease occurred in Vienna in the winter of 1916–17.

The first case noted in England occurred February 11, 1918, in Bermondsey, and the largest number of cases in one week was 18, in the last week in April. The number of cases declined thereafter,

and the epidemic, which never attained large proportions, came, at least temporarily, to an end in June.

The disease has been made notifiable in England and Wales under the name of "lethargic encephalitis." Early last year the local government board, with the assistance of the Medical Research Committee, instituted clinical and pathological investigations. The result of these have now been published in a report (N. S. 121) issued by H. M. Stationery Office, London.

The following data are abstracted from a review of the Government report, published in a recent number of the British Medical Journal, to which acknowledgments are hereby extended.

The disease is an acute affection due to a specific virus, which, like that of acute anterior poliomyelitis, probably finds entrance through the naso-pharynx, and which, like it, has a special affinity for the nervous system, though for different areas and elements.

Pathologically, lethargic encephalitis belongs to the class of polioencephalitic diseases which are inflammatory in nature. Bacteriological investigations did not yield any positive results.

Clinically the disease is a general infectious disease characterized by manifestations originating in the central nervous system, of which the most frequent and characteristic are progressive lethargy or stupor and lesion in or about the nuclei of the third pair of cranial nerves. Although a rise in temperature was not observed in all the 164 cases of the disease of which notes were obtained, there seems to be little doubt that there is always a certain amount of fever in an early stage, although occasionally it may not be observed for several days after the onset of symptoms. The common range is between 101° F. and 102° F., but temperatures up to 104° F. are not very uncommon, and in a few cases a temperature between 104° F. and 105° F. has been reached. The pyrexia usually lasts from 2 to 5 days, but may continue for 10 or even 14. It may fall suddenly or gradually with oscillations. A period of subnormal temperature not infrequently follows.

In the majority of cases a prodromal period may be recognized, but it is not very well defined, the symptoms being the early stage of those of the developed disease. Usually the first symptom is simple catarrhal conjunctivitis and in a smaller number of cases tonsilitis, simple sore throat, and bronchial catarrhs were observed, but the salient symptom observed in 80 per cent of the cases at this stage was progressive lethargy. It might be ushered in suddenly by a fainting attack or fit, but the onset was more often gradual. The patient became dazed or stupid, slept a great deal, and was drowsy by day. In marked cases the lethargy was accompanied by heaviness of the eyelids, pain in the eyes, blurred vision, and photophobia, and, in a well-marked case, gradually passed into stupor.

Headache was common, and giddiness was a highly characteristic early symptom, and in some cases was accompanied by diplopia. Mental hebetude was often associated with a highly emotional state, and the patient might exhibit, without apparent cause, symptoms which might be labeled hysterical. In other instances the mental depression was so great that melancholia was suspected. In a few cases only was the patient restless and irritable. The patient may be indisposed to speak, sometimes has distinct difficulty in articulation. The most frequent and characteristic signs in the prodromal period may be summed up as lethargy, asthenia, vertigo, headache, diplopia, and some alteration in the mental state.

After this prodromal period, if it occurs, the symptoms of a general infectious disease become manifest; the febrile reaction has already been mentioned. The patient lies in bed on the back, often unable to make any voluntary movement on account of great muscular weakness; the face is quite expressionless and masklike, and there may be definite double facial paralysis. The severest cases lie like a log in bed, resembling a waxen image in the lack of expression and mobility, and this may be accompanied by catalepsy. The patient is in a condition of stupor, although true sleep is often not obtained. Delirium, usually nocturnal, is not uncommon, and in addition to the muscular trouble there is distinct rigidity in a considerable proportion of cases. The voice becomes nasal and monotonous, sentences are uttered very slowly and words slurred into one another. Occasionally, however, once started to speak the patient chatters sentences with so great rapidity that he is often unintelligible. Irregular nonrhythmic spontaneous movements of the face, trunk, and limbs, resembling those seen in chorea or thalamic infections, are not infrequent. Cases occur which present the general symptoms of the disease—pyrexia, lethargy, asthenia—without localizing signs, and as a rule can only be diagnosed from the general surrounding circumstances. The commonest localizing sign is ophthalmoplegia, recognized in 75 per cent of the cases examined. Ptosis is the commonest form of third nerve paralysis and is usually at some stage bilateral. Finally, paralysis is usually bilateral, or becomes so, but is almost invariably more intense on one side than the other.

Dr. MacNalty recognizes seven types of cases—(*a*) A clinical affection of the third pair of nerves; (*b*) affections of the brain stem and bulb, (*c*) affections of the long tracts, (*d*) the ataxic type, (*e*) affections of the cerebral cortex, (*f*) cases with evidence of spinal cord involvement, and (*g*) the polyneuritic type in which affection of the peripheral nerves is suspected. The prognosis is better than the alarming state of the patient in the fully developed stage would suggest. Among 168 cases 37 deaths were recorded. The duration of the stupor is very variable; occasionally it lasts two to three days,

more often two to five weeks, and in one case, which eventually recovered, it continued for eight weeks. It is too soon to speak positively of after effects, but certain manifestations have persisted after the expiration of three months from the date of onset; these are an alteration in the mental condition, persistent cranial nerve palsy, the appearance of paralysis (apparently of spinal cord origin) and athetosis. The diagnosis may be very difficult, the lethargy and the progressive character of the cranial nerve paralysis are the most characteristic signs. The frequency of ptosis, paralysis of the ocular muscles, diplopia, facial paralysis, and ocular incoordination are the cranial nerve signs; optic neuritis does not occur save in very occasional cases.

Diagnosis.

The most common error in diagnosis is to attribute the condition to tuberculous meningitis; in many cases a differential diagnosis from cerebrospinal meningitis can not be made without an examination of the cerebrospinal fluid, which is little, if at all, altered in the majority of cases of lethargic encephalitis.

Some of the other difficulties encountered have already been mentioned, but the essential difficulty is to separate lethargic encephalitis from the rare cases of the cerebral form of infantile paralysis. The resemblance is very close, and it seems probable that some of the cases reported in the past as cerebrospinal poliomyelitis may have been examples of the disease now newly recognized in this country [England]. Dr. MacNalty has arranged the chief criteria for diagnosis in a table which is too long and detailed for reproduction here. The main points to be noted seem to be that, though the chief symptoms of lethargic encephalitis have been described in cases reported as cerebral poliomyelitis, they are slight, of much briefer duration, and not so constant; lethargic encephalitis, on the other hand, has a very definite clinical syndrome, characterized by progressive stupor or coma, alternating delirium, headache, giddiness, asthenia, mental and emotional changes, and, in the majority of cases, by paralysis of the third pair of cranial nerves. Paralysis, when present in lethargic encephalitis, is usually bilateral and restricted to cranial nerves, but has commonly cleared completely or is less in degree two months after recovery. In these respects it presents a marked contrast to acute poliomyelitis.

There are clinical indications that in the present outbreak both poliomyelitis and lethargic encephalitis have occurred, but not in association with each other.

Dr. MacNalty considers that the question of the identity or non-identity of the two diseases is still open, but suggests that the relation between them may perhaps be comparable to that known to exist between typhoid and paratyphoid fever.

Treatment.

With regard to treatment, no specific method has been devised, and the best that can be done is to put the patient to bed and provide him with good nursing; cold sponging is often beneficial during the pyrexial period and tends to diminish the delirium. In many instances transient or permanent relief, with diminution of stupor, followed the withdrawal of cerebrospinal fluid by lumarb puncture, especially when the fluid was under pressure. For the pain, numbness, and tingling of the limbs warmth is the best remedy, and the bedclothes should be raised on frames. Constipation is obstinate and often difficult to overcome, except by enemata, followed by such drugs as liquid paraffin or phenolphthalein. No hypnotics and no morphine or other preparation of opium should be given, and Dr. MacNalty deprecates the administration of hexamine in large and repeated doses; if it is prescribed the urine should be carefully watched for albumin. Daily cleansing of the mouth and antiseptic treatment of the nose and mouth should be carried out, and respiratory complications systematically looked for. Finally, the patient should be given to understand that his convalescence will last for at least six months after the beginning of the illness.

ESTIMATES OF POPULATION—1910-1917.

STATES, TERRITORIES, COUNTIES AND CITIES OF THE UNITED STATES.

A bulletin which is certain to be appreciated by public health officials is one just published by the Bureau of the Census, giving the estimates of population of the United States, the States and territories, counties, and the cities which had a population of 8,000 or more on April 15, 1910. It is true that the figures presented are not in any sense a census; nevertheless in the convenient form in which they are presented their compilation will be very useful. The bulletin also includes the results of the State enumeration made in 1915.

Health officers will find this publication valuable in making comparative studies of health conditions.

DEATHS DURING WEEK ENDED FEBRUARY 8, 1919, IN CITIES.

The following table shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended February 8, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," February 11, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.